



## **Coastal Protection and Restoration Authority of Louisiana**

### **Office of Coastal Protection and Restoration**

## **2010 Annual Inspection Report**

### **Hopedale Hydrologic Restoration**

State Project Number PO-24  
Priority Project List 8

August 31, 2011  
St. Bernard Parish

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## **I. Introduction**

The 3,805 acre Hopedale Hydrologic Restoration Project (PO-24) is located southeast of Yscloskey, in St. Bernard Parish, Louisiana, and is bordered by LA Hwy 46 on the west, the Mississippi River Gulf Outlet (MRGO) spoil deposition area to the north, and Louisiana Highway 624 and Bayou La Loutre to the south and east (Appendix A). The area is predominately brackish marsh (3,086 acres) and open water (719 acres) with a small amount of saline marsh, bottomland hardwoods and bottomland scrub/shrub within the MRGO spoil deposition area. The site was inspected on March 10, 2008 by representatives of OCPR and the National Marine Fisheries Service (NMFS).

## **II. Project Description and History**

Wetlands in the Hopedale area have been adversely impacted because of altered hydrology and partial impoundment caused by the construction of LA Hwy. 624 and the MRGO. During construction of LA Hwy. 624, four sets of non-gated culverts were installed under the highway. These culverts connect Bayou La Loutre with wetlands north of the highway and south of the Bayou La Loutre Ridge, and allow water to enter and exit the general project area.

As part of the construction of the MRGO, a spoil containment dike (back dike) was constructed to allow placement of material from the MRGO dredging operation. The dike almost completely impounded the marsh within the Hopedale project area, with the exception of the back dike borrow canal which directly connected to Bayou La Loutre. A plug and water control structure were originally placed in the borrow canal approximately 400 ft from its intersection with Bayou La Loutre. This structure, which consisted of three iron culverts with flap gates, provided drainage from the area, while limiting tidal increases in minimal storm events. By the mid 1990's the plug had settled and the structure had deteriorated and become inoperable. The present project replaced the original structure with a water control structure fitted with three 82" diameter combination gates (flap/sluiice gates) and two, 24"x 84" fisheries access slots (fish gates). The project was completed in December, 2004.

In 2005 the Hopedale structure suffered some minor damage due to Hurricane Katrina. In 2007/2008 the repairs, at a cost of \$64,900, were made as follows:

- Repair and replace all damaged fence panels.
- Replaced missing gate stem covers.
- Repaired damaged railing.
- Placed riprap into eroded areas.
- Replaced missing mechanical gate operator.
- Added support beam under walkway.

### **III. Inspection Purpose and Procedures**

The purpose of the annual inspection of the Hopedale Hydrologic Restoration Project (PO-24) is to evaluate the constructed project features to identify any deficiencies and prepare a report detailing the condition of project features and recommended corrective actions needed. Should it be determined that corrective actions are needed, OCPR shall provide, in the report, a detailed cost estimate for engineering, design, supervision, inspection, and construction contingencies, and an assessment of the urgency of such repairs (O&M Plan April 21, 2005). The annual inspection report also contains a summary of maintenance projects and an estimated projected budget for the upcoming three (3) years for operation, maintenance and rehabilitation. The three (3) year projected operation and maintenance budget is shown in Appendix C. A summary of past operation and maintenance projects completed since completion of the project can be found in Section II.

An inspection of the Hopedale Hydrologic Restoration Project (PO-24) was held on April 30, 2010, by Barry Richard of OCPR. This inspection coincided with the operation of the structure which was prompted by the explosion of the Deepwater Horizon Oil Rig and subsequent oil leak/spill. The flow through the structure was minimal and into the project area. There was no flow through the project structure once it was closed. There were no Photographs taken at the time of the inspection, however there has been no change since the previous inspection other than the closure of the structure.

### **IV. Inspection Results**

#### **Water Control Structure**

The fish gates were closed at the time of the inspection in accordance with the Operation and Maintenance Plan. The damage to the structure, consisting of two missing vinyl gate stem covers, was still evident at the time of the inspection.

The operations of the structure are currently performed by the OCPR. A scope of work is currently being drafted to provide operations and maintenance by a contractor. St Bernard Parish has been unresponsive in our efforts to contact them concerning the current operations plan and permit and the need to amend the two documents. The Parish is also unresponsive to our requests for information concerning the flap gates they are to install on the culverts under Hwy 624.

#### **Electronic Alarm Devices**

Both devices were damaged beyond repair by the 2008 Hurricanes. The decision not to replace this equipment has been made. This will be the last report on this equipment.

## **V. Conclusions**

The Hopedale Hydrologic Restoration Project (PO-24) is performing as designed. The structure remains closed until further notice, but is fully operational. The need for preventative maintenance and more active participation in operations is evident. It is anticipated that a contract will be in place for operations and maintenance before the end of 2010.

## **VI. Recommendations**

Perform preventative maintenance on a regular basis.

### **Immediate Repairs**

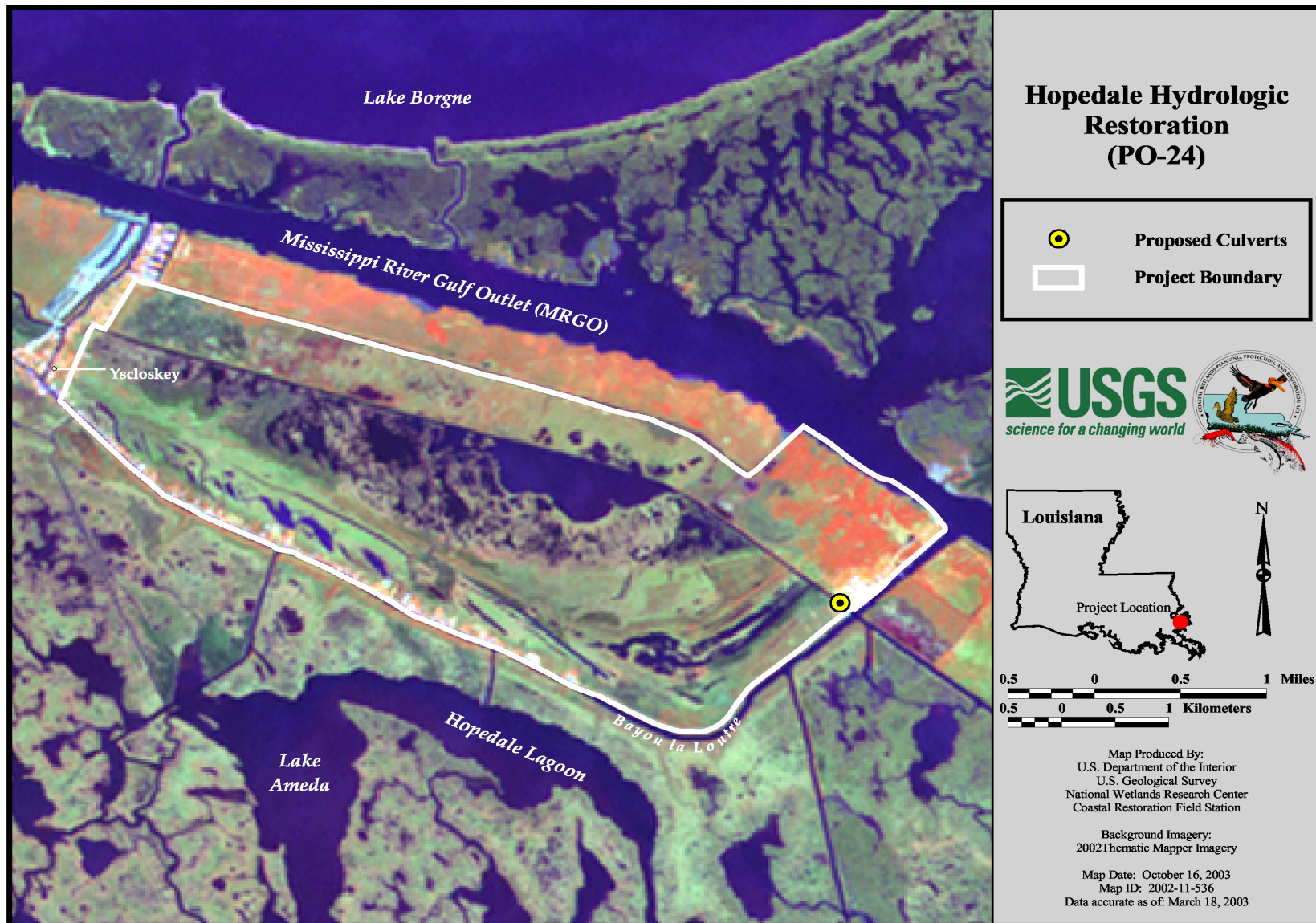
- Replace two vinyl gate stem covers.

### **Programmed Maintenance**

- Continue to check gates on structure for operability.

## **Appendix A**

### **Project Features Map**



## **Appendix B**

### **Photographs**

**(None Taken During This Inspection)**



## **Appendix C**

### **Three Year Budget Projection**

Hopedale Hydrologic Restoration / PO-24 / PPL 8  
**Three-Year Operations & Maintenance Budgets 07/01/2010 - 06/30/2013**

Project Manager  
*Barry Richard*

O & M Manager  
*Barry Richard*

Federal Sponsor  
NMFS

Prepared By  
*Barry Richard*

	2010/2011	2011/2012	2012/2013
<b>Maintenance Inspection</b>	\$3,883.00	\$3,984.00	\$4,088.00
<b>General Maintenance</b>	\$0.00	\$0.00	\$0.00
<b>Structure Operation</b>	\$8,409.00	\$8,628.00	\$8,852.00
<b>State Administration</b>	\$2,000.00		
<b>Federal Administration</b>	\$2,000.00	\$0.00	\$0.00
<b>Maintenance/Rehabilitation</b>			

10/11 Description: Construction costs are for replacement of gate stem covers.

E&D	\$79.20
Construction	\$500.00
Construction Oversight	\$30.00
Sub Total - Maint. And Rehab.	\$ 609.20

11/12 Description:

E&D	\$0.00
Construction	\$0.00
Construction Oversight	\$0.00
Sub Total - Maint. And Rehab.	\$ -

12/13 Description:

E&D	\$0.00
Construction	\$0.00
Construction Oversight	\$0.00
Sub Total - Maint. And Rehab.	\$ -

	2010/2011	2011/2012	2012/2013
<b>Total O&amp;M Budgets</b>	\$ 16,901.20	\$ 12,612.00	\$ 12,940.00

<b>O &amp; M Budget (3 yr Total)</b>	\$ 42,453.20
<b>Unexpended O &amp; M Budget</b>	\$ 346,229.67
<b>Remaining O &amp; M Budget (Projected)</b>	\$ 303,776.47

## OPERATION AND MAINTENANCE BUDGET WORKSHEET 2010/2011

Hopedale Hydrologic Restoration / PO-24 / PPL 8

DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
O&M Inspection and Report	EACH	1	\$3,883.00	\$3,883.00
General Structure Maintenance (Radio Equip.)	LUMP	1	\$0.00	\$0.00
Engineering and Design	LUMP	1	\$79.20	\$79.20
Operations	LUMP	1	\$8,409.00	\$8,409.00
Construction Oversight	LUMP	1	\$30.00	\$30.00

### ADMINISTRATION

LDNR / CRD Admin.	LUMP	1	\$2,000.00	\$2,000.00
FEDERAL SPONSER Admin.	LUMP	1	\$2,000.00	\$2,000.00
SURVEY Admin.	LUMP	1	\$0.00	\$0.00
OTHER				\$0.00
TOTAL ADMINISTRATION COSTS:				\$4,000.00

### MAINTENANCE / CONSTRUCTION

#### SURVEY

SURVEY DESCRIPTION:					
	Secondary Monument	EACH	1	\$0.00	\$0.00
	Staff Gauge / Recorders	EACH	1	\$0.00	\$0.00
	Marsh Elevation / Topography	LUMP	1	\$0.00	\$0.00
	TBM Installation	EACH	1	\$0.00	\$0.00
	OTHER				\$0.00
TOTAL SURVEY COSTS:					\$0.00

#### GEOTECHNICAL

GEOTECH DESCRIPTION:					
	Borings	EACH	1	\$0.00	\$0.00
	OTHER				\$0.00
TOTAL GEOTECHNICAL COSTS:					\$0.00

#### CONSTRUCTION

CONSTRUCTION DESCRIPTION:					
Rip Rap	LIN FT	TON / FT	TONS	UNIT PRICE	
	0	0.0	0	\$0.00	\$0.00
	0	0.0	0	\$0.00	\$0.00
	0	0.0	0	\$0.00	\$0.00
Filter Cloth / Geogrid Fabric	SQ YD	0		\$0.00	\$0.00
Navigation Aid	EACH	0		\$0.00	\$0.00
Signage	EACH	0		\$0.00	\$0.00
General Excavation / Fill	CU YD	0		\$0.00	\$0.00
Dredging	CU YD	0		\$0.00	\$0.00
Sheet Piles (Lin Ft or Sq Yds)		0		\$0.00	\$0.00
Timber Piles (each or lump sum)		0		\$0.00	\$0.00
Timber Members (each or lump sum)		0		\$0.00	\$0.00
Hardware	LUMP	1		\$500.00	\$500.00
Materials	LUMP	1		\$0.00	\$0.00
Mob / Demob	LUMP	1		\$0.00	\$0.00
Contingency	LUMP	1		\$0.00	\$0.00
General Structure Maintenance	LUMP	1		\$0.00	\$0.00
OTHER				\$0.00	\$0.00
OTHER				\$0.00	\$0.00
OTHER				\$0.00	\$0.00
TOTAL CONSTRUCTION COSTS:					\$500.00

**TOTAL OPERATIONS AND MAINTENANCE BUDGET: \$16,901.20**

## OPERATION AND MAINTENANCE BUDGET WORKSHEET 2011/2012

Hopedale Hydrologic Restoration / PO-24 / PPL 8

DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
O&M Inspection and Report	EACH	1	\$3,984.00	\$3,984.00
General Structure Maintenance (Radio Equip.)	LUMP	1	\$0.00	\$0.00
Engineering and Design	LUMP	1	\$0.00	\$0.00
Operations	LUMP	1	\$8,628.00	\$8,628.00
Construction Oversight	LUMP	1	\$0.00	\$0.00

### ADMINISTRATION

LDNR / CRD Admin.	LUMP	0	\$0.00	\$0.00
FEDERAL SPONSER Admin.	LUMP	0	\$0.00	\$0.00
SURVEY Admin.	LUMP	0	\$0.00	\$0.00
OTHER				\$0.00
TOTAL ADMINISTRATION COSTS:				\$0.00

### MAINTENANCE / CONSTRUCTION

#### SURVEY

SURVEY DESCRIPTION:					
	Secondary Monument	EACH	0	\$0.00	\$0.00
	Staff Gauge / Recorders	EACH	0	\$0.00	\$0.00
	Marsh Elevation / Topography	LUMP	0	\$0.00	\$0.00
	TBM Installation	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
	TOTAL SURVEY COSTS:				\$0.00

#### GEOTECHNICAL

GEOTECH DESCRIPTION:					
	Borings	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
TOTAL GEOTECHNICAL COSTS:					\$0.00

#### CONSTRUCTION

CONSTRUCTION DESCRIPTION:						
	Rip Rap	LIN FT	TON / FT	TONS	UNIT PRICE	
		0	0.0	0	\$0.00	\$0.00
		0	0.0	0	\$0.00	\$0.00
		0	0.0	0	\$0.00	\$0.00
	Filter Cloth / Geogrid Fabric		SQ YD	0	\$0.00	\$0.00
	Navagation Aid		EACH	0	\$0.00	\$0.00
	Signage		EACH	0	\$0.00	\$0.00
	General Excavation / Fill		CU YD	0	\$0.00	\$0.00
	Dredging		CU YD	0	\$0.00	\$0.00
	Sheet Piles (Lin Ft or Sq Yds)			0	\$0.00	\$0.00
	Timber Piles (each or lump sum)			0	\$0.00	\$0.00
	Timber Members (each or lump sum)			0	\$0.00	\$0.00
	Hardware		LUMP	1	\$0.00	\$0.00
	Materials		LUMP	1	\$0.00	\$0.00
	Mob / Demob		LUMP	1	\$0.00	\$0.00
	Contingency		LUMP	1	\$0.00	\$0.00
	General Structure Maintenance		LUMP	1	\$0.00	\$0.00
	OTHER				\$0.00	\$0.00
	OTHER				\$0.00	\$0.00
	OTHER				\$0.00	\$0.00
TOTAL CONSTRUCTION COSTS:						\$0.00

**TOTAL OPERATIONS AND MAINTENANCE BUDGET: \$12,612.00**

## OPERATION AND MAINTENANCE BUDGET WORKSHEET 2012/2013

Hopedale Hydrologic Restoration / PO-24 / PPL 8

DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
O&M Inspection and Report	EACH	1	\$4,088.00	\$4,088.00
General Structure Maintenance (Radio Equip.)	LUMP	1	\$0.00	\$0.00
Engineering and Design	LUMP	1	\$0.00	\$0.00
Operations	LUMP	1	\$8,852.00	\$8,852.00
Construction Oversight	LUMP	1	\$0.00	\$0.00

### ADMINISTRATION

LDNR / CRD Admin.	LUMP	0	\$0.00	\$0.00
FEDERAL SPONSER Admin.	LUMP	0	\$0.00	\$0.00
SURVEY Admin.	LUMP	0	\$0.00	\$0.00
OTHER				\$0.00
TOTAL ADMINISTRATION COSTS:				\$0.00

### MAINTENANCE / CONSTRUCTION

#### SURVEY

SURVEY DESCRIPTION:					
	Secondary Monument	EACH	0	\$0.00	\$0.00
	Staff Gauge / Recorders	EACH	0	\$0.00	\$0.00
	Marsh Elevation / Topography	LUMP	0	\$0.00	\$0.00
	TBM Installation	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
TOTAL SURVEY COSTS:					\$0.00

#### GEOTECHNICAL

GEOTECH DESCRIPTION:					
	Borings	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
TOTAL GEOTECHNICAL COSTS:					\$0.00

#### CONSTRUCTION

CONSTRUCTION DESCRIPTION:						
	Rip Rap	LIN FT	TON / FT	TONS	UNIT PRICE	
		0	0.0	0	\$0.00	\$0.00
		0	0.0	0	\$0.00	\$0.00
		0	0.0	0	\$0.00	\$0.00
	Filter Cloth / Geogrid Fabric		SQ YD	0	\$0.00	\$0.00
	Navagation Aid		EACH	0	\$0.00	\$0.00
	Signage		EACH	0	\$0.00	\$0.00
	General Excavation / Fill		CU YD	0	\$0.00	\$0.00
	Dredging		CU YD	0	\$0.00	\$0.00
	Sheet Piles (Lin Ft or Sq Yds)			0	\$0.00	\$0.00
	Timber Piles (each or lump sum)			0	\$0.00	\$0.00
	Timber Members (each or lump sum)			0	\$0.00	\$0.00
	Hardware		LUMP	1	\$0.00	\$0.00
	Materials		LUMP	1	\$0.00	\$0.00
	Mob / Demob		LUMP	1	\$0.00	\$0.00
	Contingency		LUMP	1	\$0.00	\$0.00
	General Structure Maintenance		LUMP	1	\$0.00	\$0.00
	OTHER				\$0.00	\$0.00
	OTHER				\$0.00	\$0.00
	OTHER				\$0.00	\$0.00
TOTAL CONSTRUCTION COSTS:						\$0.00

**TOTAL OPERATIONS AND MAINTENANCE BUDGET: \$12,940.00**

## **Appendix D**

### **Field Inspection Form**

Annual Inspection Report  
Hopedale Hydrologic Restoration  
State Project No. PO-24

MAINTENANCE INSPECTION REPORT CHECK SHEET

Project No. / Name: <b>Hopedale Hydrologic Restoration Project (PO-24)</b>					Date of Inspection: <u>4/30/2010</u>	Time: <u>10:30 am</u>
Structure No. _____					Inspector(s): <u>Richard</u>	
Structure Description: <u>Gated Sheeppile Structure</u>					Water Level	Inside: <u>N/A</u> Outside: <u>N/A</u>
Type of Inspection: <u>Annual</u>					Weather Conditions: <u>Clear Skies</u>	
Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks	
Swing Gates 84" D	Good	None	None			
Fish Gates 24" x 84"	Good	None	None		Gates were closed at time of inspection due to Oil Spill in the GOM.	
Handrails Grating Hardware etc.	Good	None	None		Two gate stem covers missing.	
Galv. Pile Caps	Good	None	None			
Signage /Supports	Good	None	None			
Riprap	Good	None	None			
Silt/Fill	Good	None	None			
Are there any signs of vandalism? No						
Conditions of existing levees? Good						
Noticable breaches? None						